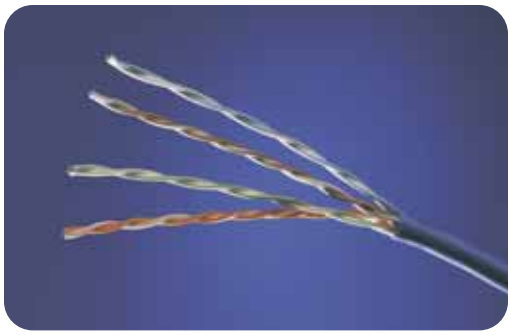
Basic Structured Cabling Systems

Category 5e 4-Pair Plenum Data Cable



ADC's Basic Category 5e and Category 6 Structured Cabling Systems are complete channel solutions offering 20-year product performance warranties along with a multitude of product choices and design options. In addition, the components of these economical systems are also guaranteed to meet the minimum requirements of TIA 568B for Category 5e and Category 6 for dependable data transmission in any network configuration, from the switch to the network interface.

Features:

- Unparalleled delay skew performance
- Manufactured with lead-free materials

Compliances:

- UL Subject 444
- (UL)-C(UL) Type CMP
- ICEA S-90-661
- NEC 800 Type CMP
- ISO/IEC 11801 Category 5e
- ETL verified TIA/EIA-568-B.2 Category 5e horizontal cable requirements

SPEC SHEET

Basic Structured Cabling Systems

Category 5e 4-Pair Plenum Data Cable

Specifications

CONSTRUCTION

Conductors:	24 AWG solid bare copper
Insulation:	100% FEP
Pairing:	Short, staggered pair lays
Jacket:	Lead-free, flame retardant PVC
Nominal outer diameter:	4.45 mm (.175")

ELECTRICAL CHARACTERISTICS

Conductor DC resistance (maximum):	9.38 Ω/100 meters (28.6 Ω/1000 ft) @ 20 °C (68 °F)
DC resistance unbalance (maximum):	2%
Mutual capacitance (maximum):	5.6 nF/100 meters (17 pF/ft)
Operating temperature (maximum):	75 °C (167 °F)
Operating voltage (maximum):	300 VDC
Worst case cable skew:	25 nS/100 meters (25 nS/328 ft)
Nominal velocity of propagation:	76%

FREQ (MHz)	FITTED IMPEDANCE (Ohms)	INSERTION LOSS (dB/100m)		RETURN LOSS (dB/100m)		Pair-Pair NEXT (dB/100m)		PSNEXT (dB/100m)	
	SPEC	Max	TIA Spec	Min	TIA Spec	Min	TIA Spec	Min	TIA Spec
1	100 +/- 15	1.9	2.0	25.6	20.0	71.7	65.3	69.6	62.3
4	100 +/- 15	4.0	4.1	27.1	23.0	64.1	56.3	60.8	53.3
8	100 +/- 15	5.6	5.8	28.5	24.5	57.9	51.8	56.3	48.8
10	100 +/- 15	6.3	6.5	29.8	25.0	57.2	50.3	55.2	47.3
16	100 +/- 15	8.1	8.2	29.5	25.0	54.2	47.2	51.7	44.2
20	100 +/- 15	9.2	9.3	30.4	25.0	53.1	45.8	50.0	42.8
25	100 +/- 15	10.2	10.4	31.2	24.3	48.5	44.3	46.8	41.3
31.25	100 +/- 15	11.5	11.7	30.7	23.6	50.9	42.9	48.0	39.9
62.5	100 +/- 15	16.5	17.0	26.7	21.5	46.6	38.4	44.0	35.4
100	100 +/- 15	21.3	22.0	24.6	20.1	42.5	35.3	39.9	32.3
155	100 +/- 15	26.5		23.0		44.6		40.0	

FREQ (MHz)	Pair-Pair ACR (dB/100m)		PSACR (dB/100m)		Pair-Pair ELFEXT (dB/100m)		PSELFEXT (dB/100m)	
	Min	TIA Spec	Min	TIA Spec	Min	TIA Spec	Min	TIA Spec
1	69.8	63.3	67.7	60.3	67.3	63.8	65.8	60.8
4	60.2	52.2	56.9	49.2	55.8	51.8	54.2	48.8
8	52.4	46.0	50.7	43.0	49.9	45.7	48.3	42.7
10	51.0	43.8	48.8	40.8	47.8	43.8	46.3	40.8
16	46.3	39.0	43.8	36.0	43.9	39.7	42.3	36.7
20	44.1	36.5	41.1	33.5	41.9	37.8	40.3	34.8
25	38.5	33.9	36.8	30.9	40.1	35.8	38.5	32.8
31.25	39.6	31.2	36.8	28.2	38.1	33.9	36.5	30.9
62.5	30.4	21.4	27.9	18.4	32.5	27.9	30.8	24.9
100	21.8	13.3	19.0	10.3	29.0	23.8	27.3	20.8
155	20.5		17.8		27.5		25.3	

NOTE: The above listed discrete frequency electrical performance values are provided for engineering informatoin only. Actual compliance testing is based on swept frequency measurements. The spec values are based on TIA/EIA-568-B.2 specification.

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Ordering Information

Description	Weight (Lbs/kft)	Catalog Number
4-pair cable		
Reel packaging	21	5ESP-XXYY
Reelex–1000'	20	5ESP-XXII

XX = Jacket Color: BL = Blue, WT = White, GY = Gray, GN = Green, YL = Yellow, RD = Red
YY = Length: 02 = 1,000 ft, 04 = 2,000 ft

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